

AMENDMENTS TO THE CLAIMS

The following is a complete listing of revised claims with a status identifier in parenthesis.

LISTING OF CLAIMS

1. (Currently Amended) A method of transmitting data comprising the steps of:

channel coding an encoder packet to produce a channel coded encoder packet; and

puncturing and/or repeating the channel coded encoder packet to produce a first encoder sub-packet having a first size based on a size of the encoder packet and a first data transmission rate at which the first encoder sub-packet is to be transmitted, wherein the first data transmission rate is different from and based on a data rate for transmitting the first encoder sub-packet indicated in a first rate indication message from a receiver, the puncturing including removing bits from the channel coded encoder packet.

2. (Original) The method of claim 1, wherein the first data transmission rate is based on first channel conditions measured at a receiver to which the first encoder sub-packet is intended.

3. (Original) The method of claim 1, wherein the first encoder sub-packet has a format which allows the first encoder sub-packet to be soft

combined with a second encoder sub-packet derived from the same encoder packet as the first encoder sub-packet.

4. (Original) The method of claim 3, wherein the first encoder sub-packet is of a different size than the second encoder sub-packet.

5. (Original) The method of claim 3, wherein the first encoder sub-packet is of an identical size than the second encoder sub-packet.

6. (Original) The method of claim 1 comprising the additional step of: adding a first encoder packet size identifier to the first encoder sub-packet indicating the size of the encoder packet from which the first encoder sub-packet was derived.

7. (Original) The method of claim 6 comprising the additional step of: transmitting the first encoder sub-packet with the first encoder packet size identifier at the first data transmission rate.

8. (Original) The method of claim 7, wherein the first encoder sub-packet with the first encoder packet size identifier is modulated using a modulation scheme based on the first data transmission rate.

9. (Original) The method of claim 7 comprising the additional step of:

prior to the step of transmitting the first encoder sub-packet, transmitting a rate indication message to a receiver to which the first encoder sub-packet is intended indicating the first data transmission rate.

10. (Original) The method of claim 1 comprising the additional step of: adding an encoder sub-packet format identifier to the first encoder sub-packet indicating a first format of the first encoder sub-packet.

11. (Original) The method of claim 10 comprising the additional step of:

transmitting the first encoder sub-packet with the first encoder sub-packet format identifier at the first data transmission rate.

12. (Original) The method of claim 11, wherein the first encoder sub-packet with the first encoder sub-packet format identifier is modulated using a modulation scheme based on the first data transmission rate.

13. (Original) The method of claim 11 comprising the additional step of:

prior to the step of transmitting the encoder sub-packet, transmitting a first rate indication message to a receiver to which the first encoder sub-packet is intended indicating the first data transmission rate.

14. (Previously Presented) The method of claim 1 comprising the additional step of:

prior to the step of puncturing and/or repeating the channel coded encoder packet, receiving the first rate indication message from a receiver to which the encoder packet is intended indicating a data rate based on first channel conditions measured at the receiver.

15. (Cancelled).

16. (Previously Presented) The method of claim 14 comprising the additional step of:

transmitting a new rate message to the intended receiver indicating the first data transmission rate.

17. (Original) The method of claim 1 comprising the additional steps of:
receiving a NACK message indicating that a transmission of the encoder sub-packet was not successfully received at a receiver to which the first encoder sub-packet was intended; and

puncturing and/or repeating the channel coded encoder packet to produce a second encoder sub-packet having a second size based on a size of the encoder packet and a second data transmission rate at which the second encoder sub-packet is to be transmitted.

18. (Currently Amended) A method of receiving a data transmission comprising the steps of:

receiving at a receiver a message indicating a first data transmission rate;

receiving a first encoder sub-packet with a first encoder packet size identifier indicating a size of the first encoder sub-packet, the first encoder sub-packet being generated by puncturing and/or repeating a channel coded encoder packet, and the puncturing including removing bits from the channel coded encoder packet; and

decoding the first encoder sub-packet using the first encoder packet size identifier and the first data transmission rate, wherein the first data transmission rate is different from and based on a data rate for transmitting the first encoder sub-packet indicated in a first rate indication message from a receiver.

19. (Original) The method of claim 18 comprising the additional step of:

transmitting a negative acknowledgement message and a rate indication message if the first encoder sub-packet can not be successfully decoded, wherein the rate indication message indicates current channel conditions at the receiver.

20. (Original) The method of claim 19, comprising the additional steps of:

receiving a message indicating a second data transmission rate;
receiving a second encoder sub-packet with a second encoder packet size identifier indicating a size of the second encoder sub-packet; and
decoding the second encoder sub-packet using the second data transmission rate, the second encoder packet size identifier and the first encoder sub-packet.

21. (Currently Amended) A method of receiving a data transmission comprising the steps of:

receiving at a receiver a message indicating a first data transmission rate;
receiving a first encoder sub-packet with a first encoder sub-packet format identifier indicating a format of the first encoder sub-packet, the first encoder sub-packet being generated by puncturing and/or repeating a channel coded encoder packet, the puncturing including removing bits from the channel coded encoder packet; and

decoding the first encoder sub-packet using the first encoder sub-packet format identifier and the first data transmission rate, wherein the first data transmission rate is different from and based on a data rate for transmitting the first encoder sub-packet indicated in a first rate indication message from a receiver.

22. (Original) The method of claim 21 comprising the additional step of:

transmitting a negative acknowledgement message and a rate indication message if the first encoder sub-packet can not be successfully decoded, wherein the rate indication message indicates current channel conditions at the receiver.

23. (Original) The method of claim 22, comprising the additional steps of:

receiving a message indicating a second data transmission rate;
receiving a second encoder sub-packet with a second encoder sub-packet format identifier encoder sub-packet indicating a format of the second encoder sub-packet; and
decoding the second encoder sub-packet using the second data transmission rate, the second encoder sub-packet format identifier and the first encoder sub-packet.

24. (Currently Amended) A method of transmitting data comprising the steps of:

channel coding an encoder packet to produce a channel coded encoder packet; and

puncturing and/or repeating the channel coded encoder packet to produce a first encoder sub-packet having a first size based on a size of the encoder packet and a first data transmission rate at which the first encoder sub-packet is to be transmitted and including a first encoder packet size identifier to the first encoder sub-packet indicating the size of the encoder packet from which the first encoder sub-packet was derived, wherein the first data transmission rate is different from and based on a data rate for transmitting the first encoder sub-packet indicated in a first rate indication message from a receiver, the puncturing including removing bits from the channel coded encoder packet.